

DEPARTMENT OF PLANNING & LAND MANAGEMENT

Subdivision #234
Dekkers Davidson
80 Squaw Sachem Trail
Director

Report updated: February 24, 2012
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and Marcia Rasmussen,

GENERAL INFORMATION

Owner/Applicant:	Dekkers Davidson 80 Squaw Sachem Trail Concord, MA 01742	
Architect/Engineer:	Paul Mahoney Mahoney Architects 70 Seven Star Lane Concord, MA 01742	Stamski & McNary, Inc. 1000 Main Street Acton, MA 01720
Requested Action:	Approval of a street improvement plan to provide additional frontage for a two lot Definitive Subdivision of land under M.G.L. Ch. 41, Sect. 81-T and the Town of Concord Subdivision Rules and Regulations. (<i>See Attachment</i>).	
Location:	The property is located on Squaw Sachem Trail, a private gravel road off of Nashawtuc Road in the Nashawtuc Hills neighborhood. (Parcel 1739)	
Size of Tract:	1.89 acres (82,305 SF)	
Zoning/Existing Land Use:	The property is located in the Residence A Zoning District and is developed with a 1-story single-family dwelling and a garage. It is bounded by a former railroad right-of-way on its northern edge; the Assabet River lies directly across the railroad bed from the property.	
Surrounding Land Uses/(Zoning):	The site is adjacent to properties within the Residence A District. Many of the lots to the south and west are developed with single-family homes; much of the land to the east and north is undeveloped or held in conservation either by the Trustees of Town Donations or the Concord Land Conservation Trust. The paper street has long been used as a cart path/walking trail and provides access to the former railroad trails and Egg Rock.	
Utilities:	The site is served by Town electric, but not water and sewer.	

I. Existing Conditions

The site, located at 80 Squaw Sachem Trail, is within the Residence A Zoning District, and comprises 82,305 SF of area with frontage on both Squaw Sachem Trail to the west and an unimproved paper street that is currently used as a cart path/walking trail to the south. The property currently contains a 1-story

dwelling and a detached garage, and has a driveway with access off of Squaw Sachem Trail. Portions of the site are within the 100-foot wetland buffer and 200-foot Riverfront Area.

Squaw Sachem Trail is a private 40-foot wide right-of-way that was laid out by William Wheeler as early as 1884 or as late as 1903. The road is currently about 20-feet wide at the opening, and then it narrows to about 10 feet with 3-foot shoulders on either side; it is surfaced in gravel. The gravel portion provides access to 4 homes, and appears to extend from the intersection with Nashawtuc Road to the edge of 10B Squaw Sachem Trail (the property to the north of the Davidson land). On the Town's GIS mapping, Squaw Sachem Trail right-of-way appears to continue in a full circle, from the edge of 10B all the way around the Nashawtuc Road loop, to Simon Willard Road.

The *Paper Street* is a private 40-foot wide right-of-way that was laid out on a plan recorded in 1903 but never developed. It extends from Squaw Sachem Trail, along the southern edge of the Davidson's property, to the former B&M railroad right-of-way. It has been used as a cart path/walking trail for Concord residents for many years, and provides a connection from the Nashawtuc Hill neighborhood to the conservation land around Egg Rock.

II. Proposed Project

The Applicant is currently seeking approval of street improvements for the *Paper Street* to provide additional frontage for a two-lot definitive subdivision of the property at 80 Squaw Sachem Trail, which is in the Residence A Zoning District. The Residence A Zoning District requires 40,000 SF of lot area and 150 feet of frontage (or 120 feet of frontage and 150 feet of lot width if applying the frontage exception). Proposed Lot B1 will have 42,275 SF of area and 150 feet of frontage along Squaw Sachem Trail, and will contain the existing house; proposed Lot B2 will have 40,030 SF of area and 514 feet of frontage (55.51 feet on Squaw Sachem Trail; 458.68 feet on the paper street, of which 120 feet is proposed to be improved as a street and 60 feet is proposed to be improved as driveway), and will be developed with a single-family home.

The Applicant is not proposing to fully upgrade the paper street to Town standards, but is seeking waivers from the Subdivision Rules and Regulations in order to allow it to remain in a more natural condition. The current proposal is for an 18-foot wide road surfaced with gravel.

The Applicant has not proposed any improvements to Squaw Sachem Trail, but is amenable to doing so, if determined to be necessary by the Planning Board.

III. Subdivision Rules & Regulations

Waivers Requested

In accordance with Section 2.4 of the Subdivision Rules and Regulations of the Town of Concord, the Applicant is requesting the following waivers:

6.8 Streets – Design Standards

Where a minimum pavement width of 22' is required in the Residence A Zoning District, the Applicant is proposing an 18' wide gravel street within the right-of-way for a minimum length of 120' in order to provide practical access along the frontage to the proposed dwelling on Lot B2.

6.9 Curbing

Where sloped granite curbing is required at intersections with local streets, the Applicant is not proposing curbing due to the belief that this is a low-volume small-scale upgrade of a private way and

would not be in keeping with the abutting access.

6.10 Sidewalks

Where sidewalks are required along one side of local streets, the Applicant feels that adequate pedestrian access will be provided along the private way to be constructed.

6.11 Monuments

Where monuments are required to be installed at all street intersections, the Applicant states that existing monuments are in place and are shown on the Record Plan.

6.13 Storm Drainage

The Applicant states: "To the extent applicable for the improvements within this paper street, it is our belief that we have provided a stormwater design which meets the intent of the Concord Public Works Design & Construction Standards & Details for the proposed use which provides for a level of quality that meets Town objectives."

6.14 Water Facilities

No municipal water service is currently available to the site; the existing hydrant on Nashawtuc Road presently serves as the nearest fire protection for the dwelling at 80 Squaw Sachem (approximately 1000 feet away?) and the proposed lot will be served by a private well.

6.16.3 Fire Alarm

The Applicant is requesting a waiver from providing a fire alarm system in one of the dwellings.

6.17 Trees and Other Plantings

Where street trees are required to be planted along subdivision roads, the Applicant is proposing to maintain many of the existing plantings along the frontage and to loam and seed all disturbed areas.

6.18 Street Signs

Where street signs are required to be installed at all intersections, the Applicant is requesting permission to use a street number along Squaw Sachem Trail instead.

6.19 Street Lighting

Though street lights may be required at locations determined by the Superintendent of the Concord Municipal Light Plant, the Applicant is not proposing any street lights to serve the proposed dwelling.

IV. Staff Comments

A. Police Department

The Police Department has no issues with this request for 80 Squaw Sachem Trail.

B. Fire Department

After reviewing the current hydrant locations in this area and the proposed location of the new dwelling on Squaw Sachem Trail we ask consideration for the installation of a fire hydrant on Squaw Sachem Trail in the vicinity of the proposed new dwelling.

We also request that consideration be given to improving the travel surfaces to support up to 60,000 lbs. on three axles. In addition, the FD ladder truck requires a stabilizer setting distance of 13 feet. To account for snow loading, obstructions, etc. we request a working width of at least 14 feet. In addition, although not ideal, a vehicle tee-turnaround to accommodate a three axle truck would be appreciated.

C. CPW Engineering

1. Prior to subdivision approval, CPW-Engineering requests that the applicant submit an existing conditions plan for Squaw Sachem Trail from the subject parcel (#80) to Nashawtuc Road. The plan shall include: edge of gravel road (with clear widths labeled), trees (6" + dia.), fences, mailboxes, profile with spot grades at CL, edge of road and the back of Right of Way +/-, and utility information. The existing conditions plan will allow the Planning Board to properly evaluate the adequacy of the existing travel way and recommend any appropriate improvements, while also maintaining the current "rural" look to the maximum extent practicable.
2. Prior to subdivision approval, CPW-Engineering requests that the applicant compile a comprehensive list of waivers with applicable sections of the Subdivision Rules and Regulation.

D. CPW Water & Sewer Division

1. This parcel is not proposed to be sewered in the Comprehensive Wastewater Management Plan. Hence, it is not eligible to connect to Town Sewer.

E. Concord Municipal Light Plant

1. If the project is approved, CMLP will need a digital copy of the plans (AutoCAD format). These plans will allow CMLP to issue an underground electrical design which will include a cost estimate for CMLP's portion of the job.
2. CMLP will need a load letter including proposed service size for the new residential house.
3. CMLP will require an As-built drawing of the proposed underground electrical distribution plan noting all conduit locations. A copy of this plan is to be sent to the Town of Concord Building Department as part of the As-built utility installation plan.
4. All costs associated with CMLP's portion of the job will be paid for in advance by either the contractor, developer, and/or property owner as per CMLP's terms and conditions.
5. All meter locations require approval from the CMLP Meter Supervisor.
6. If applicable, the property owner shall grant CMLP an easement for all improvements to the underground electrical distribution system within the private way.
7. It is the responsibility of the contractor, developer, and/or property owner to coordinate with CMLP.

F. Building Commissioner

-The applicant needs to show that they have legal rights; within the Squaw Sachem Trail that provide access to this new lot, as well as within the paper street that they wish to make improvements within.

-The new lot will be looked at by this department as a corner lot, with two front lot lines and two side lot lines. Any new structures built on this lot will need to meet the setback requirements for this Residential A zoning district (40 foot front setbacks and 15 foot side setbacks.)

-The applicant has not shown proposed setbacks for the existing house at #80 Squaw Sachem Trail to the new right side setback line that has been created by this ANR land division, but the old house structure must be setback a minimum of 12 foot from this new right lot line.

-Both lots have adequate lot area.

-Both lots have adequate frontage if the Planning Board makes a finding, that Squaw Sachem Trail, and the improved "paper street" are adequate to provide proper access and utility services to the site.

G. Health

1. Proposed Lot B2 will be 40,030 s.f. Any house constructed on this lot will be restricted to four bedrooms or 440 gallons per day (gpd) maximum design flow, per 310 CMR 15.214(2). Design flows shall be calculated as specified in 310 CMR 15.002 and 15.203.
2. A well permit will be required prior to construction of the drinking water well for proposed lot B2. Results of water analysis demonstrating potability of the well must be submitted to the Health Division

prior to issuance of the disposal system construction permit.

3. The location of the proposed well for lot B2 is shown to be just outside the 200 ft. Riverfront area setback, and the soil absorption system is shown to be 100 ft. from the proposed well. If the well location is moved for any reason, the soil absorption system may need to be relocated to maintain a 100 ft. separation.

H. Natural Resources Division

On behalf of the Natural Resources Commission, the Division of Natural Resources has reviewed the application for a Definitive Subdivision for two lots at 80 Squaw Sachem Trail and provides the following comments and recommendations:

1. The Applicant recently received an Order of Resource Area Delineation verifying the wetland boundaries on and near the subject property, including Bordering Vegetated Wetlands and the Mean Annual High Water Mark of the Assabet River. The plan presented to the Planning Board accurately reflects the approved wetland delineation. This Order is valid through October 21, 2014.
2. The 100-foot buffer zone and 200-foot Riverfront Areas fall on the subject property (Lot B2). The Applicant has stated that no work will take place within these resource areas and therefore a Notice of Intent will not need to be filed with the Natural Resources Commission. The Natural Resources Commission recommends that the 100-foot buffer zone and 200-foot Riverfront Area be surveyed located in the field prior to commencement of work and erosion controls be installed at the limits of these resource areas to ensure there is no alteration of these areas as grading, clearing and well installation are proposed close to these resources. The Natural Resources Commission further recommends that as-built plans be provided to the Commission verifying no alteration of these resource areas.
3. The proposed work is located within Estimated and Priority Habitat for Rare and Endangered Species. The Applicant has stated that the development of this lot is exempt from review under the Massachusetts Endangered Species Act (MESA) per 321 CMR 10.14(18) which states: *the construction of a new residential dwelling, including the proposed lawfully developed paved areas, lawns and landscaped areas associated with such dwelling, on an infill lot, with frontage, of no greater than two acres in size, or such smaller lot size approved by a municipality under the applicable zoning bylaw or ordinance, provided that such lot is part of a residential subdivision that has received final, definitive approval pursuant to M.G.L. c. 41, ss. 81K-81GG (the state subdivision control law), or is part of a residential housing development that has received final, definitive approval pursuant to M.G.L. c. 40B or a special permit pursuant to M.G.L. c. 40A, and the development of the lot does not require a prospective Order of Conditions under the Wetlands Protection Act.* This exemption is for the development of lots that have previously been altered and are surrounded by other development. The Applicant should confirm with the Natural Heritage Program that this exemption applies to the proposed development of Lot B2.
4. At the Plan Review Meeting held on January 12, 2012, there was a discussion regarding the potential need to upgrade Squaw Sachem Road. If the Planning Board determines that the road needs to be upgraded, the Division of Natural Resources reserves the right to provide additional comments.
5. At the Plan Review Meeting held on January 12, 2012, it was determined that 80 Squaw Sachem Trail would not be allowed to connect to sewer unless water was brought to the site. It was determined that there was sufficient room to construct a septic system in the front yard of 80 Squaw Sachem Trail, outside NRC jurisdiction. The Division of Natural Resources recommends that the Riverfront Area be surveyed located in the field prior to commencement of work and erosion controls be installed at the limits of the 200-foot Riverfront Area to ensure there is no alteration of this area.

Planning Division

1. There has been an existing cart-path or walking trail within the paper street right-of-way that is

regularly used by Concord residents to access Egg Rock and other conservation/open space lands in the area; the proposed street improvements do not provide for pedestrian use of the right-of-way and severely limit access to two parcels to the south of the right-of-way (owned by Juliers and the Concord Land Conservation Trust) because of the super-elevation of the road surface and associated grading and proposed retaining walls.

2. The plans show a portion of the proposed paved driveway (approximately 60+ ft. long by 18 ft. wide narrowing to 12 ft.) to proposed Lot B2 within the paper street right-of-way. The driveway should be located primarily on the proposed lot and not within the right-of-way (the exception is the driveway apron that will be within the right-of-way).
3. Additionally, the proposed grading within the right-of-way shows a two foot drop-off at the end of the proposed driveway (actually higher if at the end of the proposed street improvements, which will make it difficult for pedestrians to use the proposed street to access the remaining, existing walking path in the right-of-way).
4. The Residence A zoning district requires 150 feet of frontage or 120 feet if applying the frontage exception (which is applicable in this situation since there is more than 150 of lot width at the front of the proposed house site). The Applicant could be taking advantage of the existing 55 feet of frontage on Squaw Sachem Trail to reduce the length of street improvements required on the paper street.
5. Question: Is the existing fire hydrant on Nashawtuc Road sufficient to provide fire protection to the last house on Squaw Sachem Trail?
6. Question: Can the municipal water main be extended down the remainder of Squaw Sachem Trail? If so, does this allow abutters to automatically connect to Town sewer since the sewer main exists under Squaw Sachem Trail?

VII. Staff Recommendation

Additional plans of the existing Squaw Sachem Trail were submitted late in the day on Thursday, February 23rd, which means there will have been inadequate time for further staff review prior to the meeting Tuesday night. The Planning Division recommends that the Planning Board open the public hearing for a presentation by the applicant and consultants, to discuss the merits of the proposed plan and the information submitted by the Applicant and provided in this report, to identify any additional information from the applicant, Town staff or Town Counsel and to hear public comments.